What is claimed is:

1. A method of recording image information on a recording medium, comprising the steps of:

storing motion vector information produced by detecting a motion of image information outputted from a signal source;

detecting an amount of encoded image information, in a predetermined unit, produced by encoding the image information outputted from the signal source using said motion vector information;

assigning an amount of information in the amount of information recordable on the recording medium to image information in said predetermined unit based on the amount of encoded image information in said predetermined unit;

obtaining compression ratio information representing a compression ratio used when the image information is encoded, based on the assigned amount of information;

encoding the image information outputted from the signal source using said motion vector information and said compression ratio information; and

recording the image information thus encoded on the recording medium.

2. A method according to claim 1, wherein said compression ratio information represents a quantization step size.

- 138 -

3. A system for recording image information on a recording medium, comprising:

motion detecting means for detecting a motion of image information outputted from a signal source to produce motion vector information;

memory means for storing the motion vector information produced by said motion detecting means;

encoding means for encoding the image information outputted from the signal source based on the motion vector information produced by said motion detecting means or the motion vector information stored in said memory means;

recording means for recording the image information encoded by said encoding means on the recording medium; and

control means for controlling said motion detecting means, said memory means, said encoding means, and said recording means;

said control means comprising:

means for storing the motion vector information produced by said motion detecting means in said memory means, determining an amount of information in a predetermined unit of the encoded image information from said encoding means, and determining compression ratio information representing a compression ratio in said encoding means for recording the image information, in said predetermined unit with respect to all image information to be recorded, based

on the determined amount of information and an amount of information recordable on the recording medium, before the image information outputted from the signal source is recorded on the recording medium by said recording means; and

means for reading the motion vector information from said memory means and supplying the read motion vector information and said compression ratio information to said encoding means when the image information outputted from the signal source is recorded on the recording medium by said recording means.

4. A system according to claim 3, wherein said compression ratio information represents a quantization step size.

5. A system for recording image information on a recording medium, comprising:

first memory means for storing image information outputted from a signal source;

motion detecting means for effecting a motion detecting process on main image information from the signal source and auxiliary image information from said first memory means to produce motion vector information;

vector information memory means for storing the motion vector information produced by said motion detecting means;

encoding means for encoding the image information outputted from the signal source;

recording means for recording the image information encoded by said encoding means on the recording medium;

decoding means for decoding the image information encoded by said encoding means;

second memory means for storing the image information decoded by said decoding means;

motion compensating means for reading image information represented by the motion vector information produced by said motion detecting means, from said second memory means;

first adding means for subtracting the auxiliary image information read by said motion compensating means from the main image information from the signal source;

second adding means for adding the image information decoded by said decoding means and the auxiliary image information read by said motion compensating means; and

control means for detecting the amount of the image information encoded by said encoding means, obtaining compression ratio information representative of a compression ratio in said encoding means based on the detected amount of the image information, supplying the compression ratio information to said encoding means to control the compression ratio in said encoding means, and controlling said first memory means, said motion detecting means, said vector information memory means, said encoding means, said record-

ing means, said decoding means, said second memory means, said motion compensating means, said first adding means, and said second adding means;

said control means comprising:

means for controlling said motion detecting means to produce the motion vector information, detecting the amount of the image information encoded by said encoding means, and calculating compression ratios of all the image information to be recorded, in a predetermined unit, based on the detected amount of the image information and an amount of information recordable on the recording medium, in a preprocessing procedure for producing the motion vector information and calculating the compression ratio in the encoding means; and

means for supplying the motion vector information read from said vector information memory means to said motion compensating means to use the motion vector information in said motion compensating means, and controlling the compression ratio in said encoding means, when the image information outputted from the signal source is recorded on the recording medium by said recording means.

6. A system according to claim 5, wherein said control means comprises:

amount-of-information detecting means for detecting an amount of information in said predetermined unit of the encoded image information;

compression ratio calculating means for obtaining compression ratio information representative of a compression ratio with respect to the image information from the signal source, based on the encoded image information in said predetermined unit and the amount of information recordable on the recording medium;

memory control means for storing the motion vector information in said vector information memory means and reading the motion vector information stored in said vector information memory means; and

table information memory means for storing a table of the information produced in said preprocessing procedure and the information required when the image information outputted from the signal source is recorded on the recording medium by said recording means.

7. A system according to claim 5, wherein said signal source comprises a reproducer for playing back a recording medium, and said recording medium recordable by said recording means comprises a master for manufacturing a stamper.

8. A system according to claim 7, wherein said table contains at least identification information for identifying materials recorded on the recording medium played back by said reproducer, positional information indicative of positions of the materials on the recording medium,

amount-of-information information detected by said amount-of-information detecting means, compression ratio information produced by said compression ratio calculating means, and positional information of the motion vector information in said vector information memory means.

9. A system according to claim 5, wherein said compression ratio information represents a quantization step size.

10. A system for recording image information on a recording medium, comprising:

memory means for storing image information outputted from a signal source;

motion detecting means for effecting a motion detecting process on main image information from the signal source and auxiliary image information from said first memory means to produce motion vector information;

vector information memory means for storing the motion vector information produced by said motion detecting means;

encoding means for encoding the image information outputted from the signal source;

recording means for recording the image information encoded by said encoding means on the recording medium;

decoding means for decoding the image information encoded by said encoding means, supplying the decoded infor-

mation to said memory means, and storing the decoded information in said memory means;

motion compensating means for reading image information represented by the motion vector information produced by said motion detecting means, from said memory means;

first adding means for subtracting the auxiliary image information read by said motion compensating means from the main image information from the signal source;

second adding means for adding the image information decoded by said decoding means and the auxiliary image information read by said motion compensating means; and

control means for detecting the amount of the image information encoded by said encoding means, obtaining compression ratio information representative of a compression ratio in said encoding means based on the detected amount of the image information, supplying the compression ratio information to said encoding means to control the compression ratio in said encoding means, and controlling said memory means, said motion detecting means, said vector information memory means, said encoding means, said recording means, said decoding means, said motion compensating means, said first adding means, and said second adding means;

said control means comprising:

means for controlling said motion detecting means to produce the motion vector information, detecting the amount of the image information encoded by said encoding

means, and calculating compression ratios of all the image information to be recorded, in a predetermined unit, based on the detected amount of the image information and an amount of information recordable on the recording medium, in a preprocessing procedure for producing the motion vector information and calculating the compression ratio in the encoding means; and

means for supplying the motion vector information read from said vector information memory means to said motion compensating means to use the motion vector information in said motion compensating means, and controlling the compression ratio in said encoding means, when the image information outputted from the signal source is recorded on the recording medium by said recording means.

11. A system according to claim 10, wherein said control means comprises:

amount-of-information detecting means for detecting an amount of information in said predetermined unit of the encoded image information;

compression ratio calculating means for obtaining compression ratio information representative of a compression ratio with respect to the image information from the signal source, based on the encoded image information in said predetermined unit and the amount of information recordable on the recording medium;

memory control means for storing the motion vector information in said vector information memory means and reading the motion vector information stored in said vector information memory means; and

table information memory means for storing a table of the information produced in said preprocessing procedure and the information required when the image information outputted from the signal source is recorded on the recording medium by said recording means.

12. A system according to claim 10, wherein said signal source comprises a reproducer for playing back a recording medium, and said recording medium recordable by said recording means comprises a master for manufacturing a stamper.

13. A system according to claim 12, wherein said table contains at least identification information for identifying materials recorded on the recording medium played back by said reproducer, positional information indicative of positions of the materials on the recording medium, amount-of-information information detected by said amount-of-information detecting means, compression ratio information produced by said compression ratio calculating means, and positional information of the motion vector information in said vector information memory means.

14. A system according to claim 10, wherein said compression ratio information represents a quantization step size.

15. A method of encoding image information, comprising the steps of:

storing motion vector information produced by detecting a motion of image information outputted from a signal source;

detecting an amount of encoded image information, in a predetermined unit, produced by encoding the image information outputted from the signal source using said motion vector information;

assigning an amount of information in the amount of information usable on a recording medium to image information in said predetermined unit based on the amount of encoded image information in said predetermined unit;

obtaining compression ratio information representing a compression ratio used when the image information is encoded, based on the assigned amount of information; and

encoding the image information outputted from the signal source using said motion vector information and said compression ratio information.

16. A method according to claim 15, wherein said compression ratio information represents a quantization step size.

17. A system for encoding image information, comprising:

motion detecting means for detecting a motion of image information outputted from a signal source to produce motion vector information;

memory means for storing the motion vector information produced by said motion detecting means;

encoding means for encoding the image information outputted from the signal source based on the motion vector information produced by said motion detecting means or the motion vector information stored in said memory means; and

control means for controlling said motion detecting means, said memory means, and said encoding means;

said control means comprising:

means for storing the motion vector information produced by said motion detecting means in said memory means, determining an amount of information in a predetermined unit of the encoded image information from said encoding means, and determining compression ratio information representing a compression ratio in said encoding means, in said predetermined unit with respect to all image information to be recorded, based on the determined amount of information and a usable amount of information; and

means for reading the motion vector information from said memory means and supplying the read motion

vector information and said compression ratio information to said encoding means.

18. A system according to claim 17, wherein said compression ratio information represents a quantization step size.